DOCUMENT RESUME

ED 043 158 40 EC 030 032

AUTHOR	McLean, James E.
TITLE	Stimulus Shift: A Demonstration Motion Picture. Final Report.
INSTITUTION	Kansas Univ., Lawrence. Bureau of Child Research.
SPONS AGENCY	Bureau of Education for the Handicapped (DHEW/OE), Washington, D.C.
BUREAU NO	BR-26-2019
PUB DATE	Jun 70
GRANT	OEG-0-9-262019-2325(032)
NOTE	7p.
EDRS PRICE	EDRS Price MF-$0.25 HC-$0.45
DESCRIPTORS	*Articulation (Speech), Audiovisual Aids, *Exceptional Child Research, Film Production, Instructional Films, Professional Education, *Speech Handicapped, Speech Therapy

ABSTRACT

The purposes of the project described were to demonstrate the use of innovative stimulus shift techniques in articulation and language training, and to experiment with use of motion picture photography in the education and instruction of clinicians and therapists working with speech handicapped children. A 37-minute sound color film was produced showing clinical procedures as applied to two subjects involved in articulation speech therapy. The Procedures demonstrated were developed for mentally handicapped children, but are appropriate for all clinical subjects. (KW)

EC030032

OE/BEH
PA.40
EC

ED043158

FINAL REPORT

Project Number 26-2019

Grant Number OEG-0-9-262019-2325 (032)

STIMULUS SHIFT: A Demonstration Motion Picture

James E. McLean, Principal Investigator

Robert K. Hoyt Jr.
Bureau of Child Research
University of Kansas
Lawrence, Kansas 66044

EC 030 032E

June 1970

Department of Health, Education, and Welfare

U.S. Office of Education
Bureau of Education for the Handicapped

EC030032

FINAL REPORT

Project Number 26-2019

Grant Number OEG-0-9-262019-2325 (032)

ABSTRACTED-CEC ERIC

Stimulus Shift: A Demonstration Motion Picture

A Clinical Procedure in Articulation Therapy

James E. McLean, Principal Investigator

Robert K. Hoyt Jr.
Bureau of Child Research
University of Kansas
Lawrence, Kansas
66044

June 1970

The research reported herein was performed pursuant to a grant with the Bureau of Education for the Handicapped, U.S. Office of Education, Department of Health, Education, and Welfare. Contractors undertaking such projects under government sponsorship are encouraged to express freely their professional judgment in the conduct of the project. Points of view or opinions stated do not, therefore, necessarily represent official position of the Bureau of Education for the Handicapped.

Department of Health, Education, and Welfare

U.S. Office of Education
Bureau of Education for the Handicapped

Contents

	Page
Summary	1
Background for the Project	1
Methods	2
Results	3
Conclusions	3

Summary

The purpose of this project was twofold:

1. To demonstrate the use of recently developed, innovative stimulus shift techniques in articulation and language training with handicapped children.

2. To experiment with more effective use of motion picture photography in the education and instruction of clinicians and therapists working with handicapped children.

The expected contribution to education is also twofold:

1. To demonstrate to clinicians and educators the use of stimulus shift techniques in developing the communications skills of handicapped children.

2. To demonstrate to media personnel and special educators the use of creative production and direction techniques in films dealing with technical or clinical subjects.

Background for the Project

General educators are finding it more and more difficult to manage the heterogeneity of the children they are committed to serve. Each year educators identify new types of learning problems which require new, specialized educational techniques. Thus, there is a great demand for programs and techniques for more effective, efficient learning. Such techniques are being developed in applied research settings all over the nation.

As this inventory of new techniques to handle specific kinds of learning problems is developed, educators and other behavioral scientists are finding that each advance in technique for some specific type of child adds to the pool of knowledge which is pertinent to all children. Thus each specialized, problem-specific pedagogical technique carries important information for all education.

Learning strategies and therapeutic techniques arising from research with mentally retarded children in the Parsons State Hospital and Training Center Speech and Hearing Clinic show promise for applications to larger populations of both handicapped and normal children. One particular phase of the work at Parsons has resulted in the development of a clinical theory and teaching strategy which is proving highly successful in developing improved responses in all aspects of speech and language behavior, i.e., articulation, morphology, and syntactic features.

The general strategy in this new approach is one in which new speech and language responses are developed under precise stimulus control and are made functional for the child in a systematic, programmed clinical procedure. These goals are accomplished through a series of programmed stimulus presentations which evoke and support the new responses and then systematically shift their occurrence to the control of new types of stimuli which are more like those found in a normal social environment.

This clinical program has specific significance for at least two specialized areas of education. In addition, its general principles are of concern to all in the field of education who are interested in programmed learning. This latter group, of course, is becoming a major educational resource area.

One specialized group for which this clinical program is of specific value is attempting to deal with the education of the mentally retarded child. This group includes both teachers of the retarded and educators who are training these teachers. Secondly, the procedures of the stimulus shift program are also important in clinical practice and the training of speech therapists. These specialists are now working in most major school systems and their training is being supported by fellowships under Public Law 88-164.

Through its pertinence to these areas within education, the procedures demonstrated in the stimulus shift program can contribute to the management of three major types of special educational problems -- the mentally retarded child, the speech handicapped child, and the culturally disadvantaged child. The problem is to disseminate information on the theory in such a way that clinical educators and therapists can quickly learn to apply the techniques to children handicapped by speech and/or language problems whatever the reason.

Methods

The medium chosen to help accomplish the educational task outlined in the preceding section is 16 millimeter, sound color film. The film produced represents an attempt to clearly and concisely transmit the stimulus shift concept into auditory and visual representations to allow educators and clinicians to grasp the theory and to consider ways they might apply it to their particular clinical or educational problem.

The film demonstrates a systematic clinical program for attaining carry-over in articulation therapy. The procedures shown in the film were developed from empirical evidence provided by an ongoing research program in the use of functional analysis of behavior techniques in articulation therapy at Parsons State Hospital and Training Center. The film shows the procedures as they are applied to two clinical subjects. It shows the baseline behavior of the children and traces their progress through therapy programs on the /l/ and the /ts/. Although the procedures demonstrated were developed for mentally retarded children, the procedures, and the principles on which they are based, are appropriate to all clinical subjects.

Results

The final product is a 37-minute, sound, color film of particular interest to clinical speech pathologists. The film clearly shows the development of articulation in two retarded children who are residents of Parsons State Hospital and Training Center. In conjunction with the observable development of articulation, supporting data are presented at intervals in the film and the principal investigator of the project narrates explanatory commentary and relates the subject matter to the field of speech pathology in general and the educational problems of children with speech deficiencies.

Conclusions

The finished film is specific enough to benefit critical professional audiences and yet one which is dynamic and vivid enough to appeal to semi-professionals, paraprofessionals and college students.

Because of the technical and clinical nature of this film it was necessary for the principal investigator to closely supervise both the filming and editing. The procedure demonstrated involved some very subtle stimuli and responses which are not always obvious to persons untrained in speech pathology. This method of procedure proved to be a workable arrangement. It relieved the principal investigator of the technical demands of motion picture photography and freed the motion picture technicians to concentrate on quality control and technical excellence in the filming. Such an arrangement might well be the model for subsequent media production efforts. This arrangement has the advantage of providing the professional with technical assistance early in his efforts to formulate some dissemination vehicle. This long-term arrangement seems to be much more workable than one where the principal investigator does all his own preliminary preparation for dissemination and then hands it over to an editor or cameraman to shape into some predetermined media format.

Freed of such chores, the researcher and clinician can adjust to a changing climate and employ his unique skills as a member of a team to plan programs and systems which are intrinsic to any research or training program. What this means to our own work became increasingly clear as we got deeper and deeper into this demonstration effort. Misarticulation is a common speech disorder which is often successfully treated. We have good procedures in articulation therapy. But our procedures are difficult to teach and they lack efficiency. It takes us a long time to carry out a modification of articulation patterns. So we were looking for insights, some new directions, some new tools to improve articulation therapy so that it serves more children more appropriately, and so that it can be taught with more precision to students, and so that it's more efficient in serving the persons who come to our clinics for service.

One part of our research program aims directly at analyzing procedures and trying to get a new perspective on the greatest problem speech clinicians have in articulation therapy. We call it carry-over.

The technique we used in the film gradually extends a correct response from stimulus conditions which model the topography of the response to stimulus conditions which evoke that response but do not model it. These are the stimuli which are going to control that response in the non-clinical situation at home and school.

This new perspective allows us to build carry-over into our clinical procedures from the very beginning. The process is one of getting the response established, then extending this response to more and more stimulus conditions. Thus we build specific and systematic procedures toward a carry-over of the new articulation behavior into the spontaneous speech of the child. We then move into a systematic program of extension or shift of stimulus control from this echoic condition to other non-modeling stimulus conditions.

To demonstrate this in meaningful terms was the problem at hand. The film accomplished this, not in a broad sense of covering the whole range of speech pathology, but in demonstrating one of the basics on which much speech therapy is based. Not only does the film demonstrate this, it has already done other things. In a sense it has given us much feedback during its production. It has made clearer to us how we can better utilize media and media personnel in the dissemination process. And perhaps as important as any other aspect of this project has been the confrontation it has produced. What may appear to be clear and demonstrable in the researcher's mind, or what may on paper look easy to replicate may prove to be otherwise when exposed to the relentless eye of the camera and the practical approach of the motion picture production crew. Media is not only a help to the scientist who would make the results of his work known, it is something of a taskmaster to the scientist, forcing him to look harder at his formulations, to sharpen his concepts and polish his presentation so there is no room for misinterpretation.

The film has made these contributions to our own research. We are confident that it will make significant contributions to the field of education for the handicapped.